

AMENDMENTS TO THE CLAIMS

The following Listing of Claims will replace all prior versions and listings of claims in the application.

Listing of Claims

1. (Currently amended) A method for controlling image acquisition devices associated with a client, the method comprising:

selecting, by a demultiplexor executing on a client, a TWAIN proxy application from a plurality of TWAIN_proxy applications executing on the client communicating with a server via a presentation-level~~layer~~ protocol, the selected TWAIN proxy application associated with a TWAIN_application executing on the server;

receiving by said TWAIN proxy application, from the server, over a network using the presentation-layer protocol, a command directed to an image-acquisition device associated with the client;

issuing, by the TWAIN proxy application, a TWAIN Application Programming Interface (API) call ~~the received command~~ to the associated image acquisition device, based on the received command;

receiving, from the image-acquisition device, an acquired image in a response to the issued TWAIN API call ~~command, the response comprising an acquired image~~; and

transmitting, by the client, to the server, over the network, using the presentation-level~~layer~~ protocol, the received response.

2. (Currently amended) The method of claim 1 wherein receiving a command directed to an image-acquisition device further comprises receiving the command sent by the server over the network using a presentation-level~~layer~~ protocol selected from the group consisting of ICA, RDP and XWINDOWS.

3. (Canceled).

4. (Currently amended) The method of claim 1 wherein issuing the ~~received command~~ TWAIN API call further comprises issuing to the image-acquisition device a device driver call based on the received command.

5. (Currently amended) The method of claim 1 wherein issuing the TWAIN API call ~~received command~~ further comprises directly issuing to the image-acquisition device a TWAIN API call ~~command~~ based on the received command.

6. (Currently amended) The method of claim 1 wherein issuing the TWAIN API call ~~received command~~ further comprises issuing to the associated image-acquisition device a TWAIN API call ~~command~~ based on the received command, the issued command including an indication to suppress display of a dialog box to a user.

7. (Previously presented) The method of claim 6 further comprising displaying a second dialog box to a user in lieu of the suppressed dialog box.

8. (Previously presented) The method of claim 1 further comprising receiving, from a second server via the network, a second command directed to the image-acquisition device associated with the client.

9. (Previously presented) The method of claim 1 further comprising receiving, from the server via the network, a second command directed to a second image-acquisition device associated with the client.

10. (Previously presented) The method of claim 1 further comprising receiving, from a second server via the network, a second command directed to a second image-acquisition device associated with the client.

11. (Currently amended) The method of claim 1 wherein receiving the response to the issued TWAIN API call further comprises receiving, from the image-acquisition device, data representing an image.

12. (Previously presented) The method of claim 11 wherein transmitting to the server further comprises transmitting to the server compressed image data.

13. (Previously presented) The method of claim 12 wherein transmitting to the server further comprises determining that the image data includes more than one bit for each pixel location prior to transmitting the compressed image data to the server.

14. (Previously presented) The method of claim 13 wherein determining further comprises:
compressing the image data using a first compression algorithm to form first compressed image data;

compressing the image data using a second compression algorithm to form second compressed image data; and

selecting for transmission the smaller of the first compressed image data and the second compressed image data.

15. (Previously presented) The method of claim 12 further comprising compressing compressed image data during transmission to the server.

16. (Currently amended) The method of claim 1 further comprising:

receiving, prior to receiving a response to the issued TWAIN API call, input from a user of the client; and

determining, prior to receiving a response to the issued TWAIN API call, whether to transmit the received input to the server.

17. (Currently amended) A method for remotely controlling an image acquisition apparatus associated with a client, the method comprising:

receiving, by a server from a client associated with an image acquisition device, via a network using a presentation-layer protocol, an image acquisition event ~~comprising an image acquired from the image acquisition device~~;

providing, by a redirector module executing on the server, the received event to a TWAIN application program executing on the server and associated with the image acquisition event; receiving, by the server from the TWAIN application program, a response to the provided image acquisition event including a TWAIN Application Programming Interface (API) call; and transmitting, by the server via the network, the received response to the client executing a demultiplexor, the demultiplexor:

selecting a TWAIN proxy application from a plurality of TWAIN proxy applications executing on the client, the selected TWAIN proxy application associated with the TWAIN application program; ~~and~~ forwarding the received response to the selected TWAIN proxy application; ~~and~~

receiving, from the client via the network, data representing an image acquired by the image acquisition device apparatus associated with the client.

18. (Currently amended) The method of claim 17 wherein providing the received event further comprises:

determining, from the received image acquisition event, ~~an~~ a TWAIN application program associated with the received event; and providing the received event to the determined TWAIN application program.

19-20. (Canceled).

21. (Currently amended) The method of claim ~~20~~ 17 further comprising decompressing the received image acquisition data.

22. (Previously presented) The method of claim 17 further comprising receiving an image acquisition event from a second client via the network.

23. (Currently amended) The method of claim 22 further comprising providing the image acquisition event received from the second client to a second instance of ~~an~~ a TWAIN application program associated with the image acquisition event.

24-40. (Canceled).

41. (Currently amended) A system for controlling image acquisition devices associated with a client system, the system comprising:

- a server computer comprising a processor executing a TWAIN application;

- a redirector module executing on the server and intercepting calls made by the TWAIN application;

- a multiplexor executing on the server computer and transmitting the calls to a client system communicating with the server computer over a network via a presentation-level ~~layer~~ protocol;

- a plurality of TWAIN proxy applications executing on the client system;

- an image-acquisition device associated with the client system; and

- a demultiplexor executing on the client system, the demultiplexor:

- receiving the transmitted calls,

- selecting at least one TWAIN proxy application from amongst the plurality of TWAIN proxy applications, the at least one TWAIN proxy application associated with the TWAIN application executing on the server, and

- forwarding the received calls to the at least one TWAIN proxy application, the received call including a TWAIN Application Programming Interface Call.

42. (Canceled).

43. (Previously presented) The system of claim 41, wherein the image-acquisition device generates image data responsive to receiving the calls.

44. (Currently amended) The system of claim 43, wherein the client system transmits the image data to the server computer.

45. (Currently amended) The system of claim 44, wherein the client system compresses the image data prior to transmission, and transmits the compressed data to the server computer.